

In the Claims:

Please cancel claims 1-34 and add the following new claims 35-50.

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35. (New) A method of delivering G-CSF to an animal, said method comprising providing a homologously recombinant cell that is stably transfected with a DNA construct that comprises (i) a targeting sequence comprising 20 contiguous nucleotides of SEQ ID NO:5, and (ii) a transcriptional regulatory sequence, wherein the DNA construct has undergone homologous recombination with genomic DNA upstream of the ATG initiation codon of an endogenous G-CSF coding sequence; and implanting the cell in the animal, wherein the cell secretes G-CSF.

36. (New) The method of claim 35, wherein the DNA construct further comprises an exon and a splice donor site.

37. (New) The method of claim 36, wherein the DNA construct further comprises, downstream from the splice donor site, and intron and a splice acceptor site.

38. (New) The method of claim 37, wherein the DNA construct further comprises a selectable marker gene.

39. (New) The method of claim 35, wherein the targeting sequence comprises 50

contiguous nucleotides from SEQ ID NO:5.

40. (New) The method of claim 39, wherein the targeting sequence comprises 100 contiguous nucleotides from SEQ ID NO:5.

41. (New) The method of claim 40, wherein the targeting sequence comprises 200 contiguous nucleotides from SEQ ID NO:5.

42. (New) The method of claim 41, wherein the targeting sequence comprises 500 contiguous nucleotides from SEQ ID NO:5.

43. (New) The method of claim 35, wherein the targeting sequence comprises a sequence of at least 100 nucleotides that hybridizes under highly stringent conditions with SEQ ID NO:5 or the complement thereof.

44. (New) The method of claim 43, wherein the targeting sequence is at least 400 nucleotides in length.

45. (New) The method of claim 43, wherein the targeting sequence is at least 1,000 nucleotides in length.

17 46. (New) The method of claim 35, wherein the targeting sequence comprises a sequence that is at least 100 nucleotides in length and shares at least 80% sequence identity with a fragment of SEQ ID NO:5 having the same length as the sequence.

18 47. (New) The method of claim 46, wherein the targeting sequence is at least 200 nucleotides in length.

19 48. (New) The method of claim 47, wherein the targeting sequence is at least 400 nucleotides in length.

20 49. (New) The method of claim 48, wherein the targeting sequence is at least 1,000 nucleotides in length.

50. (New) The method of claim 35, wherein the animal is a human.